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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
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08/807567

2/28/97

Petrocy et al.

277301

EXAMINER

RAMESH PATEL

ART UNIT	PAPER NUMBER
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2786

11

DATE MAILED:

INTERVIEW SUMMARY

All participants (applicant, applicant's representative, PTO personnel):

(1) Richard J. Petrocy (Applicant) Paul Gordon

(2) Ramesh Patel (4) _____

Date of Interview 11/3/98

Type: ☐ Telephonic ☐ Televideo Conference ☒ Personal (copy is given to ☐ applicant ☐ applicant's representative).

Exhibit shown or demonstration conducted: ☐ Yes ☐ No If yes, brief description: _____

Agreement ☒ was reached. ☐ was not reached.

Claim(s) discussed: 1-6

Identification of prior art discussed: Lesko et al. and Simson et al.

Description of the general nature of what was agreed to if an agreement was reached, or any other comments: _____

New abstract is permissible, Applicant agreed to negotiate claim language to distinguish patentably over the art of the record in this application

(A fuller description, if necessary, and a copy of the amendments, if available, which the examiner agreed would render the claims allowable must be attached. Also, where no copy of the amendments which would render the claims allowable is available, a summary thereof must be attached.)

☐ It is not necessary for applicant to provide a separate record of the substance of the interview.

Unless the paragraph above has been checked to indicate to the contrary. A FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION IS NOT WAIVED AND MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW.

Examiner Note: You must sign this form unless it is an attachment to another form.

Ramesh Patel
11/3/98

ABSTRACT

A protocol for self-addressing control units is effected by arranging a plurality of control units in a sequence and running a data line from a master controller with links to each control unit. The master controller will initially signal to identify itself to the next control unit down the address line. The control units that follow will identify themselves by adding a 1 to the number received from the previous control unit. This identifying address is saved in its non-volatile memory. Accordingly, the first control unit addresses itself as 1, the second control unit addresses itself as 2, etc. After all the control units have addressed themselves the communication flows back toward the master controller to verify each address by the feedback line. The master controller then sends out the data to the control units by the linked data line. This protocol has applicability to modular motor signs, flip grid signs, LED grid sign, plasma displays as well as other fields of application such as networking, prosthetics, robots, etc., of wherein a number of control units or computers are linked together. When used in connection with a modular sign, the protocol of the present invention can be used to coordinate a plurality of modular units to make outdoor displays array of unlimited size without wires. A connector with a plurality of contacts is mounted against a wall. Each circuit board contacts with a plurality spades which provide electrical and data contacts, as well as attachment to the display wall.

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1. Following claims are drafted by the examiner and considered to distinguish patentably over the art of record in this application, and presented to applicant for consideration:

1. A self-addressing control unit system for controlling a sequence of or an array of display signs comprising:

a plurality of control units each associated with a portion of the display sign array and all electrically interconnected by a signal bus;

a master or remote control means electrically interconnected with the plurality of control units by the signal bus;

communication means associated with the master or remote controller means for communicating a signal to the plurality of control units along the signal bus; and

a re-addressing means where upon when one of said plurality control units fails a new or replacement control unit will be installed and automatically re-address itself in the system by receiving an identification (ID) number from a previous or prior control unit, adding one thereto, and storing that number in the memory as its newly present address in the control unit system.

4. A self-addressing control unit system for controlling a sequence of or an array of display signs comprising:

a plurality of control units each associated with a portion of the display sign array and all electrically interconnected by a signal bus;

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a master or remote control means electrically interconnected with the plurality of control units by the signal bus;

broadcast means associated with the controller means for broadcasting a signal to the control units along the bus;

communication means associated with the master or remote controller means for communicating a signal to the plurality of control units along the signal bus; and

a re-addressing means where upon when one of said plurality control units fails a new or replacement control unit will be installed and automatically re-address itself in the system by receiving an identification (ID) number from a previous or prior control unit, adding one thereto, and storing that number in the memory as its newly present address in the control unit system.

5. The system of claim 3 wherein the control units look to the broadcast wire for an ID number and read a block of data that follows its ID number.

6. A method of networking a plurality of self-addressing control units for controlling a sequence of or an array of display signs comprising the steps of:

providing a plurality of control units each associating with a portion of the display sign array and all electrically interconnecting by a signal bus;

a master or remote control electrically interconnecting with the plurality of control units by the signal bus;

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communicating with the master or remote controller for communicating a signal to the plurality of control units along the signal bus by sending a system start-up signal from the controller to the plurality of control units; and

a re-addressing where upon when one of said plurality control units fails a new or replacement control unit will be installed and automatically re-address itself in the system by receiving an identification (ID) number from a previous or prior control unit, adding one thereto, and storing that number in the memory as its newly present address in the control unit system.

2. Applicant is reminded that applicant must pay for 2 months by 11/17/98 or pay for 3 months by 12/17/98 extension of time for us to proceed on case.

3. Following is information provided which was requested by applicant regarding another case serial number 08/808,349 which is being examined by Mr. Green Brian and his phone number is (703) 308-1011.

4. Other documents are provided to the applicant as follow:

(a) interview summary paper number 11 filed on 11/3/98;

(b) copy of extension of times PTO/B/22 form, also applicant reminded that these

forms are available on Internet at following sites <http://ftp.uspto.gov/pub/forms> or

<http://www.uspto.gov/web/forms/index.html>;

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(c) a copy of the prior art provided to the applicant which are pertinent to the application, and presented to applicant for consideration: US Pat 5,467,474 and 5,583,487 both by Inventors Ackerman et al.

5. Any inquiry concerning this or earlier communication from the examiner should be directed to Ramesh Patel at (703) 308-6673 or Paul Gordon at (703) 305-9760.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Reba I. Elmore, can be reached on (703)305-9706.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3800.

rp


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November 10, 1998